ABSTRACT

A block coding algorithm uses an original block group having n+1 original blocks of m-bit message, which a first

5   original block of m-bit message is encoded as a reference block of n-bit codeword and n original blocks of m-bit message placed after the first original block of m-bit message are encoded as n weighted blocks of n-bit codeword, based on a bit sequence of the reference block. A block

10   decoding algorithm decodes n weighted blocks to generate corresponding original blocks of m-bit message and reconstructs the first original block of m-bit message from a sequence of reference bits, wherein each reference bit implies whether each of n weighted blocks is an A type

15   weighted block or a B type weighted block.